Appendix I. Kings Beach Commercial
Core Improvement Project
Preliminary Delineation of
Wetlands and Other Waters of
the United States and USACE
Verification Letter

Kings Beach Commercial Core Improvement Project



Preliminary Delineation of Wetlands and Other Waters of the United States

Placer County, California 03-PLA-28 KP 14.79/16.53 (PM 9.19/10.27) EA 03-198-0C9300



November 2006





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List of Abbreviated Terms

U.S. Army Corps of Engineers Clean Water Act Corps

CWA

GPS global positioning system

OHWM ordinary high water mark

SR State Route

USGS U.S. Geological Survey

Preliminary Delineation of Wetlands and Other Waters of the United States

1. Summary

This report presents the results of a delineation of wetlands and other waters of the United States conducted for the Kings Beach Commercial Core Improvement Project study area in Kings Beach, California. On September 19 and 20, 2006, a Jones & Stokes botanist/wetland ecologist and a soil scientist delineated wetlands and other waters of the United States in the delineation study area to assist the Placer County Department of Public Works in determining the location and extent of areas that likely would be subject to regulation by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act (CWA). The delineation was conducted in accordance with the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and in compliance with the Sacramento District of the Corps' Minimum Standards for Acceptance of Preliminary Wetland Delineations (U.S. Army Corps of Engineers 2001). A total of 0.329 acre of jurisdictional wetlands and 0.390 acre of other waters of the United States were delineated, for a grand total of 0.719 acre of waters of the United States in the delineation study area. Eleven intermittent drainage ditches were observed within the delineation study area but were interpreted to be outside the scope of Corps jurisdiction under Section 404 because they appear to have been excavated in uplands for the purpose of drainage and do not appear to have replaced any previously existing natural stream features. All jurisdictional boundaries and determinations presented in this report are preliminary and subject to verification by the Corps' Sacramento District.

1.1. Contact Information

Project Proponent

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2. Site Description and Location

The delineation study area is located in eastern Placer County on the north shore of Lake Tahoe (Figure 1). It encompasses approximately 74.78 acres of residential and commercial parcels located adjacent to State Route (SR) 28 in Kings Beach (Figure 1). A list of the parcels in the study area is provided in Table 1.

The study area appears on the U.S. Geological Survey (USGS) 7.5-minute Kings Beach quadrangle in the SE ¼ of Section 13, Township 16 North, Range 17 East, and portions of the West ½ of Section 19, Township 16 North, Range 18 East, Mount Diablo Base and Meridian (Figure 1). The latitude and longitude for the approximate center of the project site are 39°14'00" north and 120°01'00" west. Slope gradients at the project site generally range from 0% to 5%, and elevations range from approximately 6,250 to 6,400 feet above mean sea level. To reach the project site from Sacramento, travel east on Interstate 80 and take SR 267 south to its junction with SR 28.

2.1. Precipitation and Growing Season

The closest National Weather Service cooperative weather station to the study area is located approximately 7.5 miles southwest of the delineation study area at an elevation of 6,350 feet above mean sea level (Western Regional Climate Center 2006) (Figure 1). Climate data from this weather station are presented here as a reasonable approximation of the temperature, precipitation, and growing season length for the delineation study area.

The mean annual precipitation is 31.88 inches, the mean annual maximum temperature is 56.1°F, and the mean annual minimum temperature is 30.6°F (Western Regional Climate Center 2006). The length of the growing season (based on 28° air temperature thresholds at a frequency of five years in 10) is approximately 130 days and typically extends from late May to early October in most years (Western Regional Climate Center 2006).

2.2. Vegetation

The delineation study area consists primarily of ponderosa pine woodland and residential and commercial developments but also contains a riparian woodland corridor along Griff Creek and ruderal areas. These communities are described below.

Ponderosa Pine Woodland

Ponderosa pine woodland occurs in the majority of the study area amid residential and commercial development. This plant community is characterized by an overstory composed mainly of ponderosa pine with lesser amounts of Jeffrey pine, incense cedar, and white fir. The shrub understory consists of manzanita and mountain rose. The herbaceous layer is composed of a mixture of grasses and forbs, including squirreltail, thickspike wheatgrass, small oniongrass, common tansy, and Eaton's aster.

Riparian Woodland

The riparian woodland community that occurs in the delineation study area exists adjacent to Griff Creek and is characterized by an overstory of mountain alder, black cottonwood, and Pacific willow. Yellow willow, American dogwood, and thimbleberry comprise the shrub

Table 1. Project Site Parcels

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	Page 1 of 5
Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-064-001	0.29
090-064-012	0.22
090-064-013	0.15
090-064-026	0.14
090-064-027	0.29
090-067-013	0.14
090-067-014	0.14
090-067-022	0.07
090-067-023	0.07
090-067-026	0.14
090-067-029	0.18
090-071-001	0.14
090-071-002	0.14
090-071-003	0.22
090-071-005	0.16
090-071-008	0.16
090-071-017	0.29
090-071-018	0.09
090-071-018	0.09
090-071-019	0.21
090-071-022	0.09
090-071-023	0.41
090-071-025	0.07
090-071-026	0.12
090-071-028	0.28
090-071-029	0.30
090-071-030	0.55
090-071-031	0.13
090-071-033	0.28
090-071-034	0.35
090-072-001	0.07
090-072-002	0.18
090-072-003	0.11
090-072-004	0.06
090-072-006	0.24
090-072-009	0.18
090-072-016	0.08
090-072-017	0.11
090-072-018	0.03
090-072-019	0.06
090-072-023	0.05
090-072-024	0.09
090-072-024	0.43
090-072-026	0.43
090-072-028	0.43
090-072-029	0.29
090-072-030	0.33
090-074-001	0.14
090-074-002	0.86
090-074-004	0.14
090-074-005	0.07
090-074-006	0.07
090-074-007	0.14
090-074-008	0.22
090-074-009	0.29
090-074-010	0.07
090-074-012	0.07
090-074-013	0.14
090-074-014	0.07
_ 	1 2.01

Table 1. Continued

Page 2 of 5

Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-074-018	0.29
090-074-020	0.94
090-074-021	0.04
090-074-022	0.04
090-075-001	0.03
090-075-002	0.06
090-075-009	0.07
090-075-010	0.06
090-075-014	0.39
090-075-016	0.14
090-075-017	0.14
090-075-018	0.17
090-075-019	0.17
090-075-020	0.11
090-075-025	0.21
090-080-001	0.20
090-080-002	0.21
090-080-004	0.51
090-080-005	0.12
090-080-006	0.28
090-080-007	0.62
090-080-009	0.82
090-080-017	0.95
090-080-018	0.62
090-080-022	0.36
090-080-023	0.66
090-121-010	0.29
090-121-010	0.29
090-121-013	0.25
090-121-016	0.43
090-121-017	0.14
090-121-019	0.22
090-121-023	0.58
090-121-026	0.07
090-122-001	0.43
090-122-002	0.37
090-122-004	0.15
090-122-005	0.20
090-122-010	0.09
090-122-014	0.15
090-122-017	0.18
090-122-019	0.29
090-122-021	0.31
090-122-022	0.14
090-122-023	0.21
090-122-024	0.21
090-122-025	0.14
090-122-026	
	0.14
090-122-027	0.14
090-122-028	0.14
090-122-030	0.14
090-122-031	0.36
090-122-033	0.11
090-122-034	0.10
090-122-035	0.06
000 400 000	0.09
090-122-036	0.00
090-123-001	0.23

Table 1. Continued

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Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-123-008	0.17
090-123-009	0.16
090-123-010	0.17
090-123-011	0.16
090-123-015	0.05
090-123-016	0.13
090-123-017	0.10
090-123-018	0.06
090-123-019	0.02
090-123-021	0.08
090-123-022	0.29
090-123-022	0.29
090-123-023	0.30
090-123-025	0.04
090-123-026	0.13
090-123-027	0.10
090-124-019	0.07
090-124-020	0.07
090-125-001	0.29
090-125-019	0.07
090-125-025	0.14
090-125-026	0.07
090-126-014	0.36
090-126-017	0.11
090-126-020	0.29
090-126-021	0.18
090-126-022	0.18
090-126-024	0.10
090-126-025	0.29
090-126-032	0.10
090-126-037	0.14
090-126-038	0.36
090-126-039	0.14
090-126-040	0.14
090-133-003	0.15
090-133-005	0.36
090-133-006	0.05
090-133-007	0.26
090-133-008	0.27
090-133-009	0.16
090-133-010	0.22
090-133-011	0.17
090-133-012	0.40
090-133-015	0.51
090-133-016	0.13
090-133-018	0.26
090-134-001	0.26
090-134-002	0.17
090-134-005	0.35
090-134-006	0.17
090-134-007	0.18
090-134-008	0.27
090-134-011	0.20
090-134-017	0.33
090-134-023	0.17
	0.07
090-134-024	0.37
090-134-024 090-134-029	0.37

Table 1. Continued

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Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-134-034	0.08
090-134-035	0.03
090-134-039	0.18
090-134-042	0.28
090-134-043	0.20
090-134-044	0.08
090-134-045	0.08
090-134-046	0.33
090-135-030	0.08
090-135-031	0.16
090-135-032	0.08
090-135-033	0.16
090-135-034	0.16
090-135-035	0.16
090-135-036	0.17
090-135-037	0.25
090-135-042	0.09
090-142-001	0.25
090-142-002	0.32
090-142-007	0.28
090-142-023	0.76
090-142-024	0.36
090-142-025	0.15
090-142-026	0.38
090-191-017	0.14
090-191-018	0.29
090-191-023	0.22
090-191-024	0.14
090-191-028	0.07
090-191-036	0.14
090-192-001	0.06
090-192-001	0.08
090-192-003	0.10
090-192-004	0.13
090-192-008	0.18
090-192-007	0.70
090-192-021	0.16
090-192-027	0.02
090-192-030	0.38
090-192-031	0.30
090-192-034	0.06
090-192-037	0.15
090-192-038	0.13
090-192-041	0.13
090-192-041	0.21
090-192-053	0.57
090-192-055	0.05
090-192-055	0.10
090-192-056	0.36
090-221-001	0.44
090-221-001	0.24
090-221-010	0.55
090-221-011	0.17
090-221-013	0.15
090-221-014	0.11
090-221-016	0.34
090-221-018	0.10
090-221-019	0.29

Table 1. Continued

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Placer County Assessor's Parcel Number	Area within Delineation Study Area (Acres)
090-221-020	0.21
090-221-021	0.10
090-222-016	0.19
090-222-017	0.14
117-180-001	0.46
117-180-003	0.32
117-180-005	1.11
117-180-006	0.16
117-180-007	0.15
117-180-009	0.50
117-180-012	0.24
117-180-027	0.79
117-180-028	0.78
117-180-036	0.23
117-180-037	0.23
117-180-038	0.23
117-180-039	0.22
117-180-050	0.19
117-180-052	0.66*
117-180-048	0.66*
117-180-047	0.66*
117-180-046	0.66*
117-180-045	0.66*
117-180-044	0.66*
117-180-043	0.66*

^{*} This number represents a collective acreage for these parcels. Individual parcel acreages were not available from Placer County's parcel information website http://www.placer.ca.gov/Home/Assessor/Assessment%20Inquiry/20Iframe.aspx.

understory, and the herbaceous layer contains long-anthered rush, mugwort, and small-fruited bulrush.

2.3. Ruderal Areas

Ruderal (i.e., disturbed) areas are located throughout the delineation study area. Ruderal areas primarily occur immediately adjacent to roads but also were observed adjacent to several of the sediment detention basins in the delineation study area. These areas typically consist of bare soil but may be vegetated with one to two species of annual grasses (i.e., quackgrass and thickspike wheatgrass).

2.4. Surface Hydrology

Griff Creek, a perennial stream that drains much of the area in and around the City of Kings Beach, originates approximately 1 mile east of Martis Peak and flows south through the western portion of the delineation study area, where it crosses under SR 28 and discharges into Lake Tahoe (Exhibit A). Other than Griff Creek, no other major drainages occur in the delineation study area, but a number of manmade, intermittent drainage ditches convey local snowmelt and stormwater runoff to Lake Tahoe via a stormwater collection system.

2.5. Soils

Soils in the delineation study area were mapped by the U.S. Soil Conservation Service during their survey of soils in the Lake Tahoe Basin (Rogers 1974). A total of four soil map units occur within the boundaries of the delineation study area (Figure 2). The general characteristics of the soils that occur within these map units are summarized in Table 2. Of the four soil map units that occur within the delineation study area, only the Beaches map unit is known to contain hydric inclusions (Natural Resources Conservation Service 1992).

Table 2. Soil Map Units in the Study Area

Soil Map Unit				Hydric
Symbol.a.	Name	Drainage	Hydric Soils ^a	Criteria ^b
JhC	Jabu stony sandy loam, moderately fine subsoil, variant, 2% to 9% slopes	Well drained	No hydric components or inclusions	N/A
Be	Beaches	Well drained	Watah (inclusion) Marla (inclusion) Tahoe, silt loam (inclusion)	4 2B3 2B2
Gr	Gravelly alluvial land	Somewhat poorly drained to poorly drained	No hydric components or inclusions	N/A
UmD	Umpa very stony sandy loam, 5% to 15% slopes	Well drained	No hydric components or inclusions	N/A

Notes:

- ^a Sources: Rogers 1974; Natural Resources Conservation Service 1992.
- The hydric soil criteria are defined as (from Natural Resources Conservation Service 1992): Hydric Criteria 2B2, 2B3, and 4:
 - 2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salorthids great group, Pell great groups of Vertisols, Pachic subgroups, or Cumulic subgroups that are:
 - B. poorly drained or very poorly drained and have:
 - 2) a frequently occurring water table at less than 0.5 feet from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is equal to or greater than 6.0 in/hr in any layer within 20 inches.
 - 3) a frequently occurring water table at less than 1.0 feet from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is less than 6.0 in/hr in any layer within 20 inches.
 - 4. Soils that are frequently flooded for long duration or very long duration during the growing season.

3. Methods

The following information was reviewed for this delineation:

- Kings Beach USGS 7.5-minute topographic map;
- aerial photographs of the delineation study area (flown by Majors in October 1999);
- soil survey of the Tahoe Basin (Rogers 1974);
- wetland delineation reports for portions of the delineation study area completed by Harding ESE (2001) and Mactec Engineering and Consulting (2003, 2006).

On September 19 and 20, 2006, a Jones & Stokes botanist/wetland ecologist and a soil scientist delineated wetlands and other waters of the United States located within the boundaries of the delineation study area. The delineation was conducted in accordance with the routine onsite determination method described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and in compliance with the Sacramento District of the Corps' *Minimum Standards for Acceptance of Preliminary Wetland Delineations* (U.S. Army Corps of Engineers 2001). Vegetation, soil, and hydrology data collected at eight data points during the delineation were recorded on wetland determination data sheets, which are located in Appendix A.

The scientific names of plants observed during the delineation or mentioned in the text, as well as their wetland indicator status, are provided in Appendix B. Scientific names follow *The Jepson Manual* (Hickman 1993), as updated by the Jepson Online Interchange, an online database maintained by the University of California and the Jepson Herbaria. The wetland indicator status of each species listed was obtained from Reed (1988).

A resource-grade global positioning system (GPS) unit was used to record the location of jurisdictional boundaries, data points, and other pertinent features wherever possible. The GPS data were downloaded and corrected in the office using the nearest available base-station data. The acreage of each feature was calculated in the ArcGIS program. Data were subsequently overlaid onto the aerial photo base to prepare the delineation map.

4. Results

A total of 0.719 acre of waters of the United States, consisting of 0.329 acre of wetlands and 0.390 acre of other waters of the United States, were identified within the boundaries of the delineation study area (Table 3). Intermittent drainage ditches also were observed in the delineation study area but were interpreted to be outside the scope of Corps jurisdiction under Section 404 of the CWA. The general characteristics and interpreted jurisdictional status of each feature mapped within the delineation study area are described below. Representative photographs of the wetlands and other waters observed within the delineation study area are located in Appendix C.

Table 3. Wetlands and Other Waters of the United States Found in the Delineation Study Area

Feature Type	Acres
Depressional Wetlands	0.329
Perennial Stream (Griff Creek)	0.204
Lake Tahoe	0.186
Total	0.719

4.1. Wetlands Depressional Wetlands

A total of seven depressional wetlands were found within the boundaries of the delineation study area (Exhibit A). Five of these wetlands (DW-1 to DW-5) are sediment detention basins that receive most of their hydrologic inputs from drainage ditches and that drain via corrugated metal standpipe drains. The sixth depressional wetland (DW-6) is a roadside depression that retains enough water, primarily in the form of surface runoff, to support hydrophytic vegetation. The seventh depressional wetland (DW-7) is located immediately adjacent to Lake Tahoe and receives water primarily via a culvert at its north end.

Hydrophytic plant species commonly observed in the depressional wetlands were big-leaf sedge, fewflower spikerush, American bulrush, Baltic rush, iris-leaved rush, long-anthered rush, yellow willow, and Mexican rush.

Depressional wetlands in the delineation study area were interpreted to have wetland hydrology based on observed drainage patterns and the presence of saturated soil. The soils observed in these depressional wetlands were determined to be hydric based on a low-chroma matrix (\leq 1) or, in areas where the soil had been disturbed recently, the presence of obligate hydrophytes and primary indicators of wetland hydrology (Appendix A, data sheets DP-1, DP-3, DP-5, and DP-7).

Wetland Boundaries and Jurisdictional Status

All of the depressional wetlands mapped within the study area support hydrophytic vegetation, contain hydric soils, and exhibit a positive indicator of wetland hydrology (Appendix A, data sheets DP-1, DP-3, DP-5, and DP-7). Accordingly, they all meet the definition of a wetland as described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratories 1987). Surrounding upland areas lack positive indicators of one or more of these parameters (Appendix A, data sheets DP-2, DP-4, DP-6, and DP-8).

Water that spills out of the sediment detention basins (DW-1 to DW-5) enters the stormwater collection system and appears to end up in Lake Tahoe, a navigable water of the United States. When water overflows from DW-6, it appears to flow into Griff Creek. DW-7 is located on the shore of the lake, so when it overflows, the water spills directly into Lake Tahoe.

Based on these apparent hydrologic connections to Lake Tahoe, it is concluded that all of the depressional wetlands in the delineation study area are within the scope of Corps jurisdiction under Section 404 of the CWA.

4.2. Other Waters of the United States *Perennial Stream*

Griff Creek is a perennial stream that begins approximately 1 mile east of Martis Peak and flows south through the western portion of the delineation study area (Exhibit A). The jurisdictional width (i.e., the distance between opposing ordinary high water marks [OHWMs]) of the reach that flows through the delineation study area ranges from 3 to 30 feet (Exhibit A). The OHWM was identified based on the geomorphic characteristics of the stream channel (namely shelving). The reach supports a narrow band of riparian trees and shrubs that are primarily located above the OHWM.

Jurisdictional Status

Griff Creek is hydrologically connected to Lake Tahoe, a navigable water of the United States. As such, it is concluded that Griff Creek falls within the scope of Corps jurisdiction under Section 404 of the CWA.

Lake Tahoe

Lake Tahoe is a navigable water of the United States and falls within the scope of Corps jurisdiction under Section 404 of the CWA. In the absence of adjacent wetlands, the limit of Corps jurisdiction over Lake Tahoe is the OHWM, which was has been set at an elevation of 6,229.10 feet above mean sea level by the Corps' Sacramento District (U.S. Army Corps of Engineers 2005). Using this OHWM elevation, Jones & Stokes calculated that the project area includes 0.186 acre of jurisdictional Lake Tahoe (Exhibit A).

Nonjurisdictional Drainage Ditches

A number of manmade drainage ditches were observed within the boundaries of the delineation study area (Exhibit A). The ditches appear to flow intermittently during periods of snowmelt and intense rainfall and are either unvegetated or are vegetated with upland grasses such as squirreltail, quackgrass, thickspike wheatgrass, and tall oatgrass. Although water conveyed by these drainage ditches appears to discharge into Lake Tahoe via an underground stormwater collection system, they appear to have been excavated in uplands for drainage purposes and do not appear to have replaced any previously existing natural stream features. As such, it is concluded that these intermittent drainage ditches are outside the scope of Corps jurisdiction under Section 404 of the CWA.

5. References Cited

- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1 (online edition). Available: http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/pdf/delineation_manual.pdf. Accessed: September 2006.
- Harding ESE, Inc. 2001. Kings Beach Commercial Core Improvement Project, Placer County, California—Wetland Delineation and Waters of the U.S. Inventory. August 6. Prepared for Timothy Kiser, Placer County Department of Public Works. Carson City, NV.
- Hickman, J. C. (ed.). 1993. *The Jepson Manual: Higher Plants of California*. Berkeley, CA: University of California Press.
- Mactec Engineering and Consulting, Inc. 2003. Kings Beach Water Quality Improvement Project, Placer County, California—Wetland Delineation and Waters of the U.S. Inventory. January. Prepared for Placer County Department of Public Works. Carson City, NV.
- ———. 2006. Kings Beach Commercial Core Improvement Project, Placer County, California— Waters of the U.S. Inventory. March. Prepared for Placer County Department of Public Works. Carson City, NV.
- Natural Resources Conservation Service. 1992. *Hydric Soils List for Tahoe Basin Area, California and Nevada*. Davis, CA.
- Reed, P. B., Jr. 1988. *National List of Plant Species that Occur in Wetlands: California (Region 0)*. (Biological Report 88 [26.10].) Washington, DC: U.S. Fish and Wildlife Service Research and Development. Prepared for National Wetlands Inventory, U.S. Fish and Wildlife Service, Washington, DC.
- Rogers, J. H. 1974. *Soil Survey: Tahoe Basin Area California and Nevada*. March. U.S. Soil Conservation Service in cooperation with the Regents of the University of California (Agricultural Experiment Station).

- University of California. 2006. The Jepson Online Interchange. University and Jepson Herbaria. Last updated: October 2, 2006. Available: http://ucjeps.berkeley.edu/interchange.html. Accessed: October 2006.
- U.S. Army Corps of Engineers. 2001. *Minimum Standards for Acceptance of Preliminary Wetland Delineations*. November 30. Sacramento, CA: Regulatory Branch, Sacramento District.
- U.S. Army Corps of Engineers. 2005. General Permit No. 16: Minimal Impact Activities, the Lake Tahoe Basin. October 1. Sacramento, CA: Regulatory Branch, Sacramento District.
- Western Regional Climate Center. 2006. Historical Climate Information, Tahoe, California (Station 048758). Available: http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca8758. Accessed: September 26, 2006.

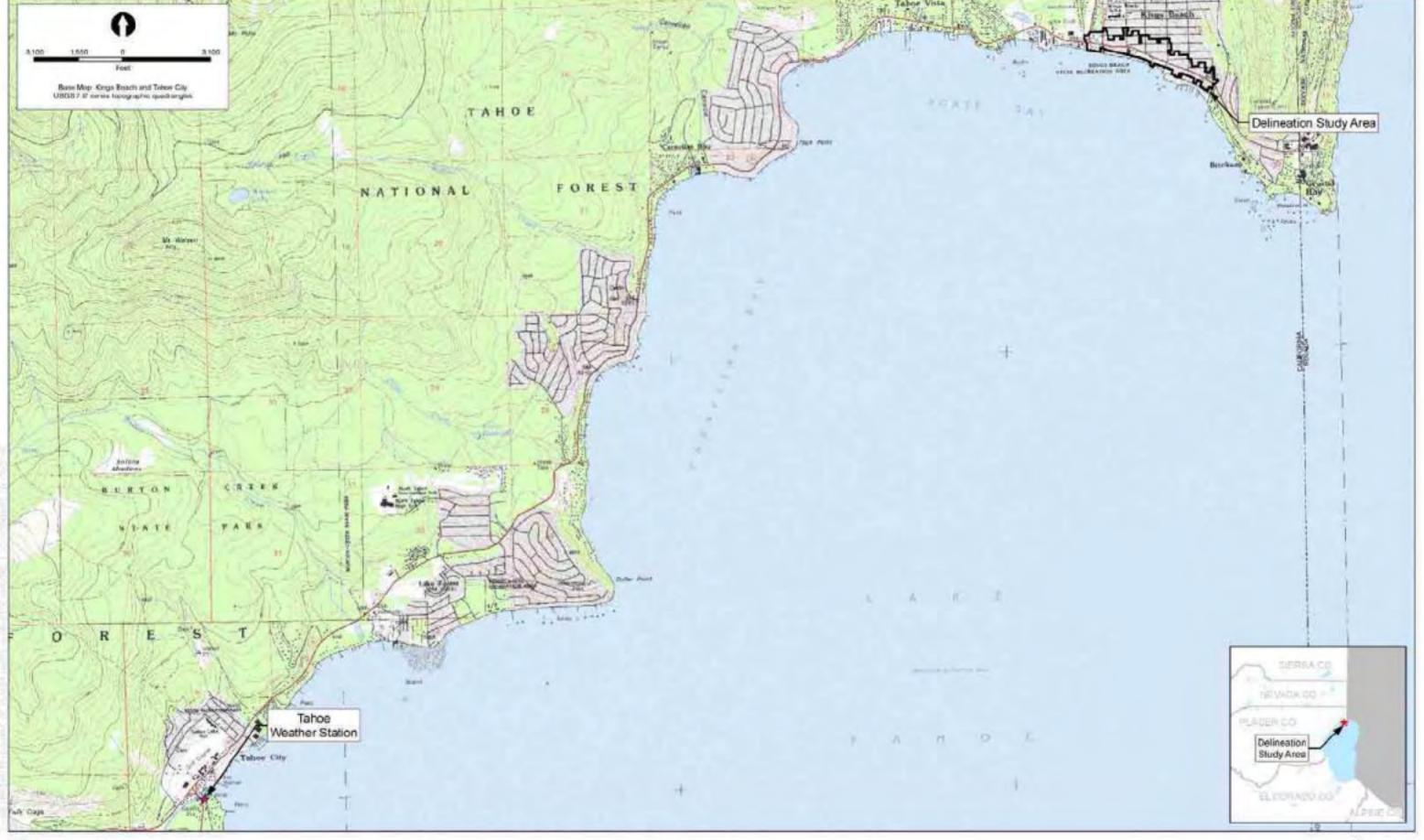


Figure 1 Project Location

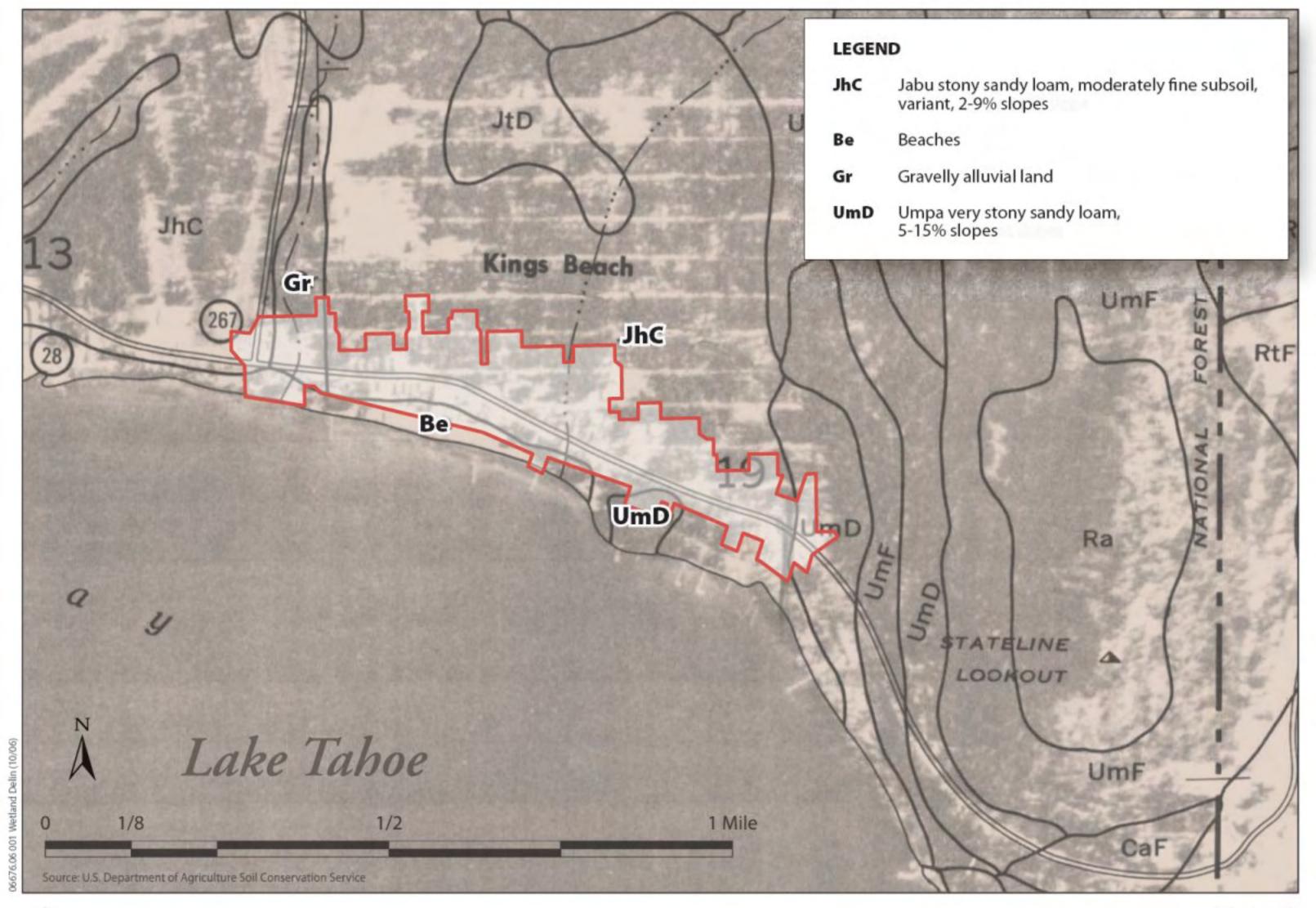


Exhibit A

Preliminary Delineation of Wetlands and Other Waters of the United States

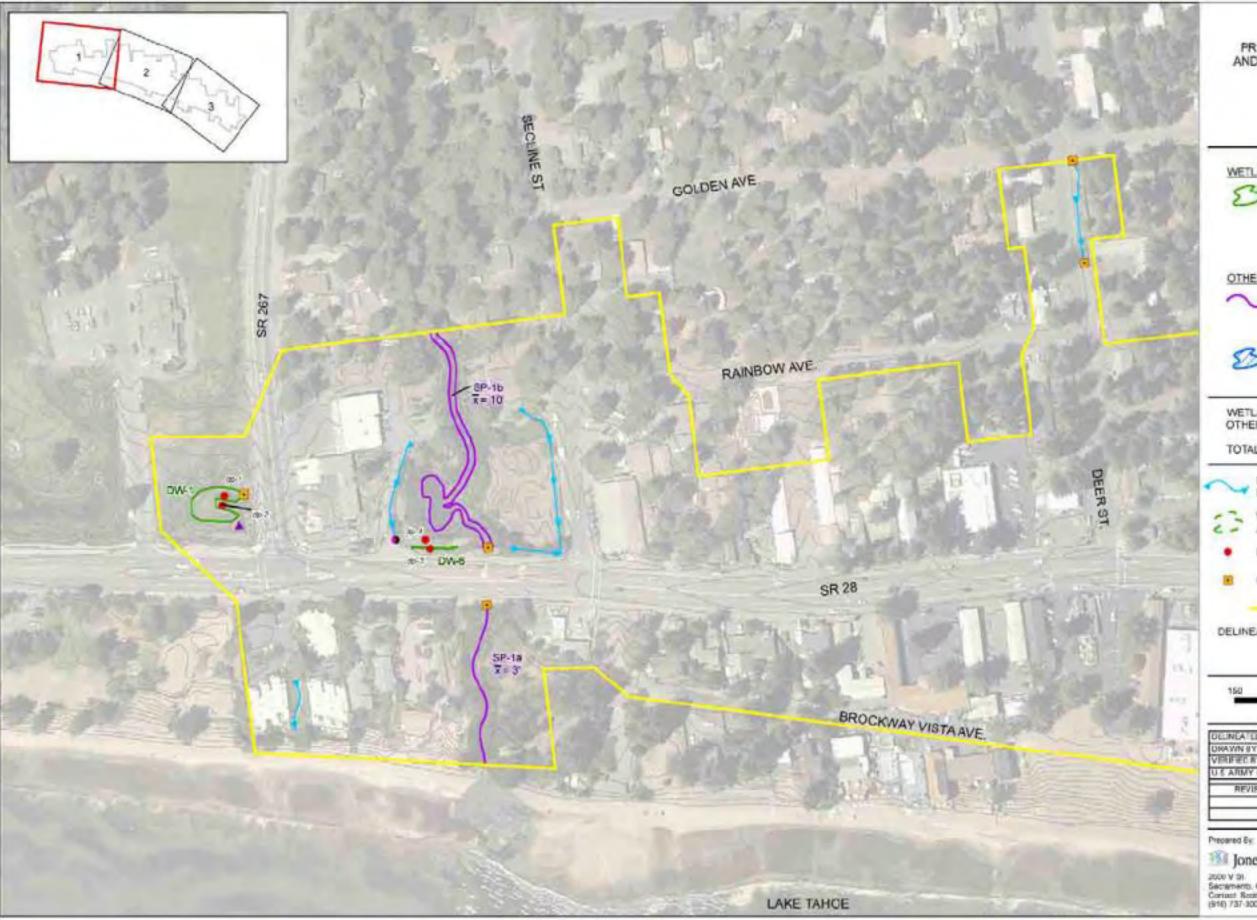


EXHIBIT A

PRELIMINARY DELINEATION OF WETLANDS AND OTHER WATERS OF THE UNITED STATES KINGS BEACH COMMERCIAL CORE IMPROVEMENT PROJECT PLACER COUNTY, CALIFORNIA

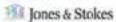
OCTOBER 2006

WE	LANDS		AREA (ACRES)
2	3 DEPRESSIO	NAL WE	TLAND 0.329
	DW-1 DW-2 DW-3 DW-4	0.099	DN-5 0.002 DN-6 0.002 DN-7 0.001
OTH	ER WATERS OF T	HE U.S.	
-	PERENNIAL	STREAM	(GRIFF CREEK) 0.204
	SP-1a		
2	S LAKE TAHOS (based on Of	fAM of 1	0.186 898.629 m NGVD)
		ED	
:	and an advanced as		TSIDE OF DELINEATION
	DATA POINT		DETENTION BASIN DRAIN
	CULVERT	•	STORM DRAIN INLET
	DEL	INEATIO	N AREA BOUNDARY
DELIN	EATION AREA (AC	RES)	74.78
	Aerial Photo	Source: Macr	ors October 1999

DELINEATED BY: C. VOIGT & J. COOK. SEPTEMBER 2000 DRAWN BY L DOUGLAS SEPTEMBER 2006 VERFECRY TRO

U.S. ARMY CORPS OF ENGINEERS REQULATORY FIE # 180

DATE



JUDO V SI Secrements, CA 15818 Contact Scott Frazier (916) 737-3000

Prepared For:

Placer County Dispartment of Public Works. Foncer Commercia Center 10025 Proceet Trail, Suite 135 Truckes, CA 96-161 Contacts, Kim Gritter, and Dan LaPlanto, P.E. Phares (\$30) 889-7615 and (\$30) 881-6231

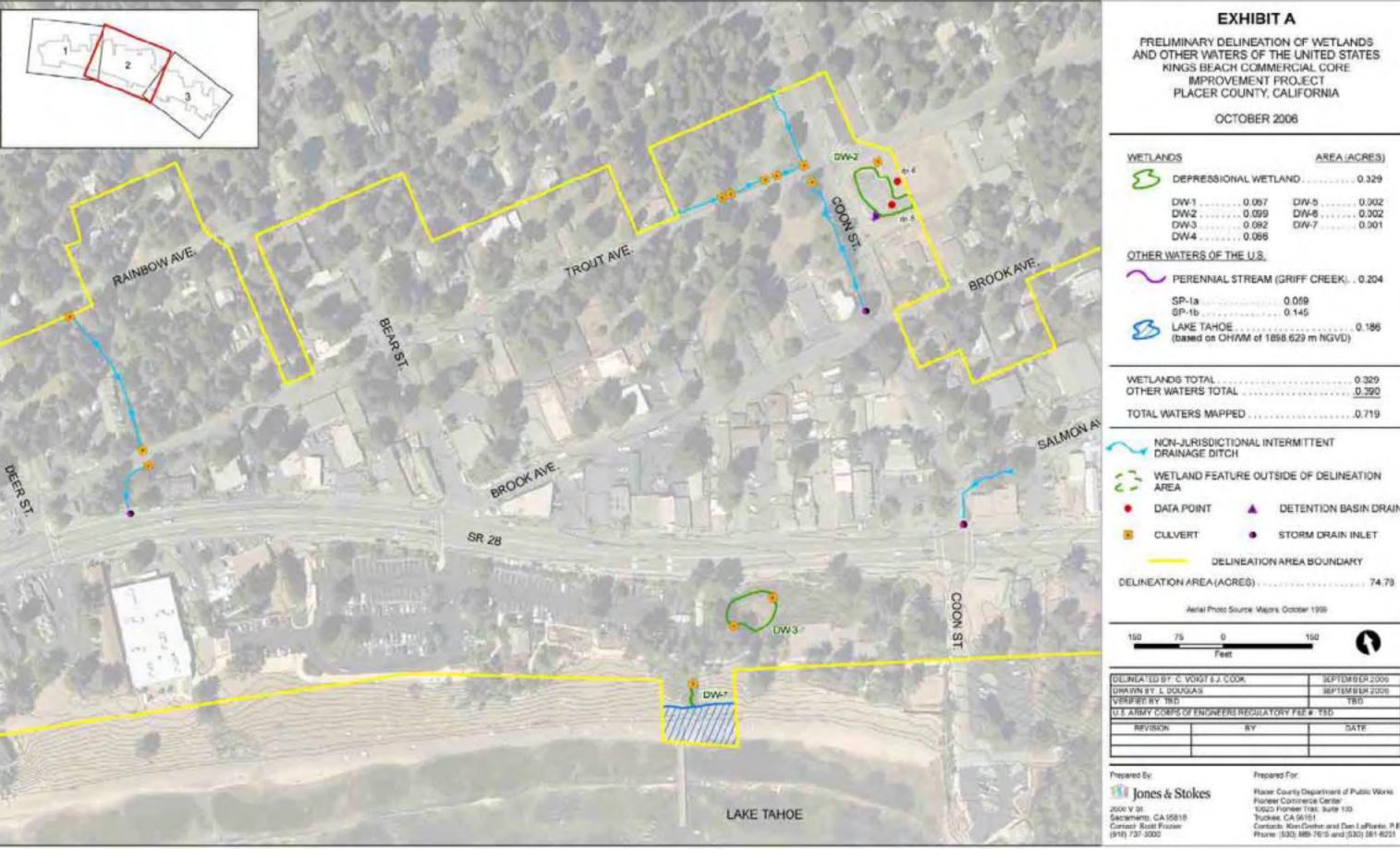


EXHIBIT A

PRELIMINARY DELINEATION OF WETLANDS AND OTHER WATERS OF THE UNITED STATES KINGS BEACH COMMERCIAL CORE IMPROVEMENT PROJECT PLACER COUNTY, CALIFORNIA

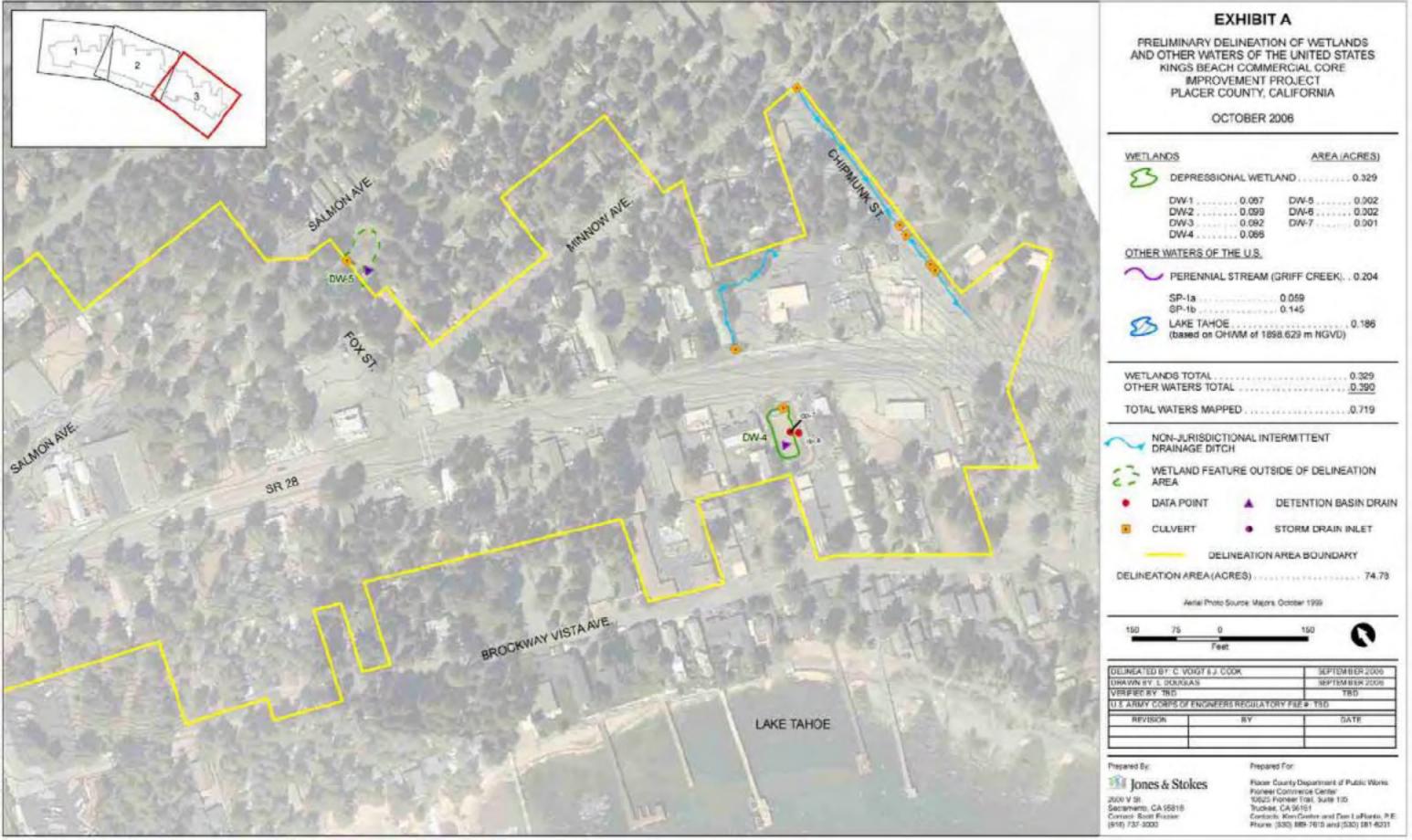
OCTOBER 2006

WETL	ANDS		AREA (ACRES)
2	DEPRESSIO	NAL WE	TLAND 0.329
	DW-1 DW-2 DW-3 DW-4	0.099	DW-6 0.002 DW-7 0.001
OTHE	R WATERS OF T	HE U.S.	
1	PERENNIAL	STREAM	(GRIFF CREEK) 0.204
	SP-1a SP-1b		
2	LAKE TAHOR (based on Or	EHVM of 1	. 0.186 1898.629 m NGVD)
			0.329
TOTAL	L WATERS MAP	PED	0.719
	NON-JURISDICT DRAINAGE DITO		NTERMITTENT
	WETLAND FEAT AREA	URE OU	TSIDE OF DELINEATION
•	DATA POINT	A	DETENTION BASIN DRAIN
	CULVERT		STORM DRAIN INLET
	DEL	INEATIO	N AREA BOUNDARY
DELINE	ATION AREA (AC	RES)	74.78

DELINEATED BY: C. VOIG	SEPTEMBER 2006	
DRAWN BY: L DOUGLAS	SEPTEMBER 2006	
VERIFIED BY: TRD	TBO	
US ARMY CORPS OF EN	GNEERS REGULATORY	FRE#: TBD
REVISION	BY	DATE

Prepared For:

Placer County Department of Public Works. Floreer Commerce Center 1500 Proceer Train, Suite 135 Tuckee, CA 96161 Contacts. Non Contra and Dan LaPlanto, P.E. France (530) 889-7615 and (530) 581-6231



Appendix A Data Sheets



DATA FORM ROUTINE WETLAND DETERMINATION

Jones & Sto	kes		ROUTINE W	ETLAND DE	ETERMINATION				
Project/Site:	Kings Beach Cor	nmercial Co	re Improveme	nt Project	State:	California			
Applicant/Owner:	Placer County De	epartment o	f Public Works		County:	Placer			
Investigator(s):	C. Voigt, J. Cook				S/T/R	13/16N/17E			
Date:	09/19/06								
Do normal circumstance	s exist on the site?		✓ YES	NO	Community ID:	Depressional W	etland		
Is the site significantly di	sturbed (atypical situa	tion)?	YES	✓ NO	Transect ID:	DW-1			
Is the area a potential pr			YES	✓ NO	Plot ID:	DP-1			
(If needed, explain below	ow)								
VEGETATION									
Dominant Plant Specie	s	Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator
Juncus xiphioides	-	Н	50	OBL					
Carex amplifolia		Н	50	OBL					
,									
Percent of dominants th	at are OBL_FACW_or	· FAC (exclud	ling FAC-).	100%	•	Total yea	etation cover	90	%
To occur or dominante an	a. a. o o o o o o o o o o o o o o o o o	. , (0,.0.00	g . 7	.0070			01411011 00101		. / •
Morpholog	ical Adaptations					Personal Knowled	ae of Region:	al Plant Commu	nities
	cal/Reproductive Adap	ntations			Ä	Technical Literatu		arriant commu	
	servation of Plant Spec		in Areas of		i i	Other (explain bel			
	ged Inundation/Satura	•	III AICUS OI			Otrici (explain bei	5 vv)		
		tion	✓ YES	□NO					
Hydrophytic Vege	tation Present?		U TES	□ NO					
Remarks:									
l-									
HYDROLOGY									
Is it the growing season?	YES	✓ NO							
	Soil Temp (record)				Wetland Hydrolo	ogy Indicators:			
Based On:	Other (explain)		data from WF	RCC (2006)	Primary Indic				
Typical length:	130	Days	5% =	6.5 days	1 minary maio	Inundat	od		
Typicar lerigiti.	130	Days	370 -	0.5 days	†				
Recorded Data (describe	halaw).					_	ed Upper 12 I	nches	
Recorded Data (describe	,					Water N			
	Stream, Lake, or Ti	•				Drift Lin			
	Aerial Photographs						nt Deposits		
	Other					✓ Drainag	e Patterns in	Wetlands	
	None Available				1				
Field Observations:					Secondary Inc	dicators (2 or more i	equired):		
Depth of S	urface Water:	none	inches			Oxidize		es in Upper 12 I	nches
Depth to S	tanding Water in Pit:	>12	inches			Water-S	Stained Leave	s	
Depth to S	aturated Soil:	>12	inches			Local S	oil Survey Da	ta	
							eutral Test		
					<u> </u>	Other (e	explain below)	
Wetland Hydrology	Present?		✓ YES	NO					
Remarks:	hroughout but not sa	aturated like	ely as the resu	It of recent s	nrinkler irrigation	1			
I THE SOIL WAS WELL	il oughout but hot sa	aturateu, ilki	cry as the resu	it of recent S	prinkier irrigation	1.			

11/22/2006 DP-1 (revised)

0011.0

SUILS								P	lot ID: DP-	1
Map Unit Nam	ne (series and	phase):	Jabu stony sandy loa	m, mod. fine subs	soil, variant	, 2-9% slopes	Drainage Class:	Well-drained		
Taxonomy (sub		Ultic Haplox					ons confirm mappe		YES	✓ NO
				DVEC [/]	NO.	l icia obscivati	она сопшти тарре	u typo:		
Is data point lo		nydric inclus	ion?	YES 1	VU					
Profile Descrip	otion			T						
						Re	edoximorphic Featu I	res	1	
	Danth			Matrix C	-1	A burndanaa				
Horizon	Depth (inches)	Texture	Structure	Matrix Co (moist		Abundance, Size, Contrast	Type, location	Color (moist)		Other
	0-1	sil		10YR 3		none				
	1-10	sl		10YR 3	/4	none				
	10-12	xgrsl		10YR 3/4	-4/1	none				***
			`							
Hydric Soil Ind	ilicators (check	Histosol	y):			Mn or Fo	Concretions or Nod	ules		
		Histic Epipe	don				nic Content in Surf		ndv Soile	
		Sulfidic Odd					treaking in Sandy S	-	idy Colla	
		Aquic Moist					National/Local Hydi			
	П		onditions (α , α !	dipyridyl test)			olain below)			
	√	-	ow-Chroma (<u><</u> 1) ma				•			
		Matrix Chro	ma <u><</u> 2 with Redoxin	norphic Concen	trations ar	nd/or Depletions	8			
Hydric Soils	s Present?			✓ YES	NO					
Remarks:										
WETLAND D										
	vegetation pre				NO					
-	rology present	?			NO				_	_
Hydric soils p	present?			✓ YES	NO	Is the sampling	ng point within a v	wetland?	✓ YES	NO
Remarks:	ntin le est de		liment detention b							
	Textur	e and Roc	k Fragment Cont	tent			Redoximo	rphic Feature	Morpho	logy
Texture				Rock Fragments	s	Abundanc	е	Туре		
cos - coarse sand s - sand	d	vfsl - very fine	e sandy loam	gr - gravelly vgr - very gravell	v	f - few c - commor	1	Fe-x - iron co		, ,
fs - fine sand		sil - silt loam		xgr - extremely g		m - many				entration (soft mass)
vfs - very fine sar		si - silt		cb - cobbly		0!		•		lule or concretion
lcos - loamy coar ls - loamy sand	rse sand	scl - sandy cla cl - clay loam	ау юат	vcb - very cobbly xcb - extremely c		Size 1 - fine (<2	mm)	d - depletion		
,		,			-	. ,	,			

sicl - silty clay loam sc - sandy clay Ifs - loamy fine sand st - stony vst - very stony lvfs - loamy very fine sand cosl - coarse sandy loam sic - silty clay xst - extremely stony sl - sandy loam c - clay

fsl - fine sandy loam

2 - medium 2-5mm) 3 - coarse (5-20mm) 4 - very coarse (20–76mm)

Contrast f - faint

d - distinct p - prominent

5 - extremely coarse (>76mm)

Location mat - soil matrix ped - ped surface por - soil pores otr - other

11/22/2006 DP-1 (revised)



DATA FORM

jones & Stok	es		ROUTINE W	ETLAND DE	ETERMINATION	I			
Project/Site:	Kings Beach Con	nmercial Co	re Improveme	nt Project	State:	California			
Applicant/Owner:	Placer County De	epartment of	f Public Works		County:	Placer			
Investigator(s):	C. Voigt, J. Cook				S/T/R	13/16N/17E			
Date:	09/19/06								
Do normal circumstances	exist on the site?		✓ YES	NO	Community ID:	Grassland			
Is the site significantly dist	urbed (atypical situa	tion)?	YES	✓ NO	Transect ID:	DW-1			
Is the area a potential prob	olem area?		YES	✓ NO	Plot ID:	DP-2			
(If needed, explain below	v)								
VEGETATION									
Dominant Plant Species		Strata	% Rel. Cover	Indicator	Associate Plan	t Species	Strata	% Rel. Cover	Indicator
Populus tremuloides		T	40	FAC+					
Cornus sericea		S	20	FACW					

Lupinus latifolius 20 NL Alnus incana ssp. tenuifolia 20 NI Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 50% Total vegetation cover 75 ☐ Morphological Adaptations ☐ Physiological/Reproductive Adaptations ☐ Visual Observation of Plant Species Growing in Areas of Personal Knowledge of Regional Plant Communities Technical Literature Other (explain below) Prolonged Inundation/Saturation YES ✓ NO **Hydrophytic Vegetation Present?** Remarks:

HYDROLOGY

HIDROLOGI							
Is it the growing season?	YES	✓ NO					
Based On:	Soil Temp (record)				Wetland Hydrolo	gy Indicate	ors:
V	Other (explain)		data from W	/RCC (2006)	Primary Indica	tors:	
Typical length:	130	Days	5% =	6.5 days			Inundated
							Saturated Upper 12 Inches
Recorded Data (describe	below):						Water Marks
	Stream, Lake, or T	ide Gauge					Drift Lines
	Aerial Photographs						Sediment Deposits
	Other						Drainage Patterns in Wetlands
	None Available						
Field Observations:					Secondary Indi	icators (2	or more required):
Depth of Su	rface Water:	none	inches		Ĭ		Oxidized Rhizospheres in Upper 12 Inches
Depth to Sta	anding Water in Pit:	>12	inches				Water-Stained Leaves
Depth to Sa	turated Soil:	>12	inches				Local Soil Survey Data
							FAC-Neutral Test
							Other (explain below)
Wetland Hydrology	Present?		YES	✓ NO			
Remarks:							

11/1/2006 DP-2

SOILS Plot ID: DP-2

JUILS								Р	ישט יטו זטוי	-2
Map Unit Nam	ne (series and	phase):	Jabu stony sandy loa	am, mod. fine su	ıbsoil, varian	t, 2-9% slopes	Drainage Class:	Well-drained		
Taxonomy (sul	•	Ultic Haplox					ons confirm mappe		✓ YES	NO
				YES	/ NO		опо остани тарро	a typo.		
Is data point lo Profile Descrip		riyaric inclus	SIOTT?		7 140					
. Tomic Descrip	JJII	1	Ī			R	edoximorphic Featu	ıres		
							Sustainer prine i date		†	
	Depth			Matrix	Color	Abundance,				
Horizon	(inches)	Texture	Structure	(mo	ist)	Size, Contrast	Type, location	Color (moist)		Other
	0-12	sl		10YR	2 3/3	none				
Hydric Soil Inc	dicators (check	all that appl	y):			•		•		
		Histosol					Concretions or Nod			
		Histic Epipe					anic Content in Surf	-	ndy Soils	
		Sulfidic Odd					Streaking in Sandy S			
		Aquic Moist	ture Regime conditions (α , $lpha$!	dinyridyl test		Usted on Other (exp	National/Local Hydrological Hyd	ric Soiis List		
		_	.ow-Chroma (≤1) ma			Oulei (ex	piani bolow)			
		-	ma ≤2 with Redoxir		entrations a	ind/or Depletions	S			
Hydric Soil	s Present?			YES	✓ NO					
Remarks:										
WETLAND D	DETERMINA	TION :								
	vegetation pre			YES	✓ NO					
Wetland hyd	rology present	:?		YES	✓ NO					
Hydric soils p				YES	✓ NO	Is the sampli	ng point within a	wetland?	YES	✓ NO
Remarks:										
			v mound that exte							
	Textur	e and Roc	k Fragment Con	tent			Redoximo	orphic Feature	Morpho	ology
Texture				Rock Fragme	nts	Abundanc	e	Туре		
cos - coarse san s - sand	ıd	vfsl - very fine	e sandy loam	gr - gravelly vgr - very grav	ellv	f - few c - commor	n	Fe-x - Iron c Fe-nc - iron		n (soft mass) oncretion
fs - fine sand		sil - silt loam		xgr - extremely		m - many	· ·	Mn-x - mang	janese cond	centration (soft mass)
vfs - very fine sa lcos - loamy coal		si - silt scl - sandy cl	av loam	cb - cobbly vcb - very cobl	hlv	Size		Mn-nc - mar d - depletion		dule or concretion
ls - loamy sand	100 Sand	cl - clay loam	•	xcb - extremel	•	1 - fine (<2	mm)	<u> </u>	<u> </u>	
Ifs - loamy fine s	and	sicl - silty clay	y loam	st - stony		2 - medium	2 5mm)	Location		

st - stony vst - very stony lfs - loamy fine sand lvfs - loamy very fine sand sc - sandy clay cosl - coarse sandy loam sic - silty clay xst - extremely stony sl - sandy loam fsl - fine sandy loam c - clay

3 - coarse (5–20mm) 4 - very coarse (20–76mm)

5 - extremely coarse (>76mm)

Contrast f - faint

d - distinct

p - prominent

mat - soil matrix

ped - ped surface por - soil pores otr - other

11/1/2006 DP-2



Jones & Stok	es		ROUTINE W	DATA FOR ETLAND DE	RM ETERMINATION				
Project/Site:	Kings Beach Con	nmercial Co	re Improveme	nt Project	State:	California			
Applicant/Owner:	Placer County De	partment of	f Public Works		County:	Placer			
Investigator(s):	C. Voigt, J. Cook				S/T/R	19/16N/18E			
Date:	09/19/06								
Do normal circumstances	exist on the site?		✓ YES	NO	Community ID:	Depressional W	etland		
Is the site significantly distr	urbed (atypical situat	tion)?	YES	✓ NO	Transect ID:	DW-6			
Is the area a potential prob	olem area?		YES	✓ NO	Plot ID:	DP-3			
(If needed, explain below	v)								
VEGETATION Dominant Plant Species		Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator
Juncus mexicanus		Н	75	FACW	Tanacetum vul	gare	Н	5	NL
Carex amplifolia		Н	20	OBL					
Percent of dominants that	are OBL, FACW, or	FAC (exclud	ling FAC-):	100%		Total veg	etation cover	75	%

Personal Knowledge of Regional Plant Communities
Technical Literature

Other (explain below)

HYDROLOG	ř							
Is it the growing s	season?	YES	✓ NO					
Based On:		Soil Temp (record)				Wetland Hydrolog	gy Indica	tors:
	✓	Other (explain)		data from \	WRCC (2006)	Primary Indica	tors:	
Typical length:		130	Days	5% =	6.5 days			Inundated
								Saturated Upper 12 Inches
Recorded Data ((describe	below):						Water Marks
		Stream, Lake, or Ti	de Gauge					Drift Lines
	✓	Aerial Photographs						Sediment Deposits
		Other					✓	Drainage Patterns in Wetlands
		None Available						
Field Observatio	ons:					Secondary Indi	cators (2	or more required):
De	epth of Su	rface Water:	none	inches				Oxidized Rhizospheres in Upper 12 Inches
De	epth to Sta	anding Water in Pit:	>13	inches				Water-Stained Leaves
De	epth to Sa	turated Soil:	>13	inches				Local Soil Survey Data
								FAC-Neutral Test
								Other (explain below)
Wetland Hyd	drology l	Present?		✓ YES	☐ NO			
Remarks:								
Manmade I	bank of c	obbles is present a	along the n	orth side of t	he roadside dra	inage ditch but o	n the so	outh side of the ditch (closest to the road) the
bank is less	s well det	fined.						

11/1/2006 DP-3

☐ Morphological Adaptations
 ☐ Physiological/Reproductive Adaptations
 ☐ Visual Observation of Plant Species Growing in Areas of

✓ YES

NO

Prolonged Inundation/Saturation

Hydrophytic Vegetation Present?

Remarks:

eou e

SUILS								P	ot ID: DP-	3
Map Unit Name ((series and p	ohase):	Jabu stony sandy loa	m, mod. fine subs	soil, variant	, 2-9% slopes	Drainage Class:	Well-drained		
Taxonomy (subgr		Ultic Haplox					ons confirm mappe	d type?	YES	✓ NO
				YES VI	NO			. ,,,		
Is data point locat Profile Descriptio		nyuno moius	ion:							
- Sine Decemption						Re	edoximorphic Featu	res		
							, and a suite	- *		
	Depth			Matrix Co	olor	Abundance,				
Horizon ((inches)	Texture	Structure	(moist		Size, Contrast	Type, location	Color (moist)		Other
	0-13	sl		10YR 3	/1	none				
Hydric Soil Indica	ators (check	all that apply	/):							
		Histosol					Concretions or Nod			
	_	Histic Epipe					nic Content in Surf	-	ndy Soils	
		Sulfidic Odo					treaking in Sandy S National/Local Hydi			
		Aquic Moist	are Regime onditions (α , α -	dinyridyl teet)			National/Local Hydi olain below)	IC SOIIS LIST		
		U	ow-Chroma (<1) ma	,,,,,		Culei (ext	Jiani bolow)			
	=		ma <u>≤</u> 2 with Redoxin		trations a	nd/or Depletions	S			
Hydric Soils F				✓ YES	□NO					
Remarks:										
WETLAND DE										
Hydrophytic veg	-				NO					
Wetland hydrolo		?			NO					
Hydric soils pre Remarks:	esent?			✓ YES	NO	Is the sampling	ng point within a v	vetland?	✓ YES	NO
			dside depression t duration during t					drophytic vege	tation, wh	ich suggests that
	Textur	e and Rocl	r Fragment Cont					rphic Feature	Morpho	logy
Texture		ufol	andy lases	Rock Fragments	s	Abundance f - few	е	Type	noomte-ti-	(aoft mass)
cos - coarse sand s - sand		vfsl - very fine I - loam	sanuy ioam	gr - gravelly vgr - very gravell	у	t - tew c - commor	1	Fe-x - iron co		` '
fs - fine sand		sil - silt loam		xgr - extremely g	-	m - many		Mn-x - mang	anese conc	entration (soft mass)
vfs - very fine sand lcos - loamy coarse		si - silt scl - sandy cla	av loam	cb - cobbly vcb - very cobbly	,	Size		Mn-nc - man d - depletion	ganese nod	lule or concretion
ls - loamy sand		cl - clay loam	•	xcb - extremely c		1 - fine (<2r	mm)	. u - depiedon		
Ifs - loamy fine sand		sicl - silty clay		st - stony	-	2 - medium	,	Location		

lvfs - loamy very fine sand cosl - coarse sandy loam sl - sandy loam fsl - fine sandy loam sc - sandy clay sic - silty clay vst - very stony xst - extremely stony c - clay

3 - coarse (5–20mm) 4 - very coarse (20–76mm)

5 - extremely coarse (>76mm)

p - prominent

DP-3

Contrast f - faint d - distinct mat - soil matrix ped - ped surface por - soil pores otr - other

11/1/2006



DATA FORM

jones	X Stor	LCS .		ROUTINE W	ETLAND DE	ETERMINATION	l			
Project/Site:		Kings Beach Con	nmercial Co	re Improveme	nt Project	State:	California			
Applicant/Own	er:	Placer County De	partment o	f Public Works	;	County:	Placer			
Investigator(s)		C. Voigt, J. Cook				S/T/R	19/16N/18E			
Date:		09/19/06				1				
	cumstances	exist on the site?		✓ YES	NO	Community ID:	Ruderal			
Is the site sign	nificantly dist	urbed (atypical situat	ion)?	YES	✓ NO	Transect ID:	DW-6			
Is the area a	-		,	YES	✓ NO	Plot ID:	DP-4			
(If needed, e	explain belov	v)								
VEGETAT	ION									
Dominant Pla	ant Species		Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator
Elymus lanceo	olatus		Н	50	NI*					
Elytrigia repen	s		Н	50	NI*					
5			F40/ 1 1		001	1	T. ()	:	50	0/
Percent of do	minants that	t are OBL, FACW, or	FAC (exclud	ling FAC-):	0%		_ I otal veg	etation cover	50	%
	Physiologica Visual Obse	cal Adaptations al/Reproductive Adap ervation of Plant Spec ed Inundation/Saturat	ies Growing				Personal Knowled Technical Literatu Other (explain bel	re	al Plant Commu	nities
Hydrophy	vtic Vegeta	ation Present?		YES	✓ NO					
Remarks:	, regen									
HYDROLC										
Is it the growin		YES	✓ NO							
Based On:		Soil Temp (record)				Wetland Hydrol	ogy Indicators:			
	✓	Other (explain)		data from WR	RCC (2006)	Primary Indic	ators:			
Typical length	:	130	Days	5% =	6.5 days		Inundat	ed		
						1	Saturate	ed Upper 12 I	Inches	
Recorded Dat	a (describe	below):					☐ Water N			
		Stream, Lake, or Ti	de Gauge				Drift Lin			
	<u> </u>	Aerial Photographs	as Caage					nt Deposits		
		• .							Mada a d	
		Other					Drainag	je Patterns in	vvetiands	
	Ш	None Available				+				
Field Observa	itions:					Secondary Inc	dicators (2 or more i	required):		
	Depth of Su	rface Water:	none	inches			_	d Rhizospher	es in Upper 12 I	nches
		anding Water in Pit:	>18	inches				Stained Leave		
	Depth to Sa	turated Soil:	>18	inches				oil Survey Da	ıta	
								eutral Test		
							Other (e	explain below)	
Wetland H	ydrology I	Present?		YES	✓ NO					
Remarks:										
l										

11/1/2006 DP-4

SOILS Plot ID: DP-4

JUILS								Г	וסנ וט: טף-	4
Map Unit Nar	me (series and	phase):	Jabu stony sandy loa	m, mod. fine s	ubsoil, varian	t, 2-9% slopes	Drainage Class:	Well-drained		
Taxonomy (sı		Ultic Haplox	eralfs			Field observati	ions confirm mappe	d type?	✓ YES	NO
	located within a			YES [✓ NO			,,		
Profile Descr		Tryano moiae	1011:							
1						Re	edoximorphic Featu	ıres	Ι	
									1	
	Depth			Matrix	Color	Abundance,				
Horizon	(inches)	Texture	Structure	· ·	oist)	Size, Contrast	Type, location	Color (moist)		Other
	0-18	vgrs		10YF	R 3/2	none				
Hydric Soil In	ndicators (check	k all that appl	y):	•		•	•	•		
		Histosol					Concretions or Nod			
		Histic Epipe					anic Content in Surf	-	ndy Soils	
		Sulfidic Odd					Streaking in Sandy S			
		Aquic Moist	ure Regime onditions (α , α -	dinyridyl toot	.)		National/Local Hydi plain below)	ric Soiis List		
			ow-Chroma (≤1) ma		.)	Culei (ex	piairi below)			
		-	ma ≤2 with Redoxin		entrations a	ind/or Depletions	S			
Hydric Soi	ils Present?			YES	✓ NO					
Remarks:										
WETLAND	DETERMINA	TION :								
Hydrophytic	c vegetation pre	esent?		YES	✓ NO					
Wetland hy	drology present	t?		YES	✓ NO					
Hydric soils	s present?			YES	✓ NO	Is the sampli	ng point within a	wetland?	YES	✓ NO
Remarks:							-			
Texture	Textur	re and Roc	k Fragment Cont	tent Rock Fragme	ents	Abundanc		rphic Feature	Morpho	logy
cos - coarse sa	and	vfsl - very fine	e sandy loam	gr - gravelly		f - few	-	Fe-x - iron c	oncentration	(soft mass)
s - sand		I - loam		vgr - very gra		c - commor	n	Fe-nc - iron	nodule or co	oncretion
fs - fine sand vfs - very fine s	sand	sil - silt loam si - silt		xgr - extremel	ly gravelly	m - many		-		entration (soft mass) lule or concretion
lcos - loamy co		scl - sandy cl	ay loam	vcb - very cob	bly	Size		d - depletion		a.o or corroredion
Is - loamy sand		cl - clay loam		xcb - extreme	ly cobbly	1 - fine (<2	,	-		
Ifs - loamy fine lvfs - loamy ver		sicl - silty clay sc - sandy cla		st - stony vst - very stor	ıv	2 - medium 3 - coarse (Location mat - soil ma	atrix	
cosl - coarse sa	•	sic - silty clay	•	xst - extremel	•		arse (20–76mm)	ped - ped su		

d - distinct p - prominent

DP-4

4 - very coarse (20-76mm) ped - ped surface 5 - extremely coarse (>76mm) por - soil pores otr - other Contrast f - faint

11/1/2006

c - clay

sl - sandy loam fsl - fine sandy loam



DATA FORM

Joines & 6101.					ETERMINATION				
Project/Site:	Kings Beach Cor	nmercial Co	ore Improveme	nt Project	State:	California			
Applicant/Owner:	Placer County De	epartment o	f Public Works	<u> </u>	County:	Placer			
Investigator(s):	C. Voigt, J. Cook				S/T/R	19/16N/18E			
Date:	09/19/06								
Do normal circumstances			✓ YES	☐ NO	Community ID:	Depressional W	etland		
Is the site significantly dist		tion)?	YES	✓ NO	Transect ID:	DW-2			
Is the area a potential prob			YES	✓ NO	Plot ID:	DP-5			
(If needed, explain below	v)								
VEGETATION									
Dominant Plant Species		Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator
Scirpus americanus		Н	30	OBL					
Eleocharis pauciflora		Н	70	OBL					
Percent of dominants that	are OBL, FACW, or	FAC (exclud	ling FAC-):	100%		Total veg	etation cover	80	%
Morphologic	al Adaptations					Personal Knowled	lae of Region:	al Plant Commu	nities
	al/Reproductive Adap	ntations			F	Technical Literatu		arriant commu	Tillico
	rvation of Plant Spec		in Areas of			Other (explain bel			
	ed Inundation/Satura		, 000 01			ouror (oxpiani so	···,		
			✓ YES	NO					
Hydrophytic Vegeta	ition Present?								
Remarks:									
HVDDOL OOV									
HYDROLOGY									
Is it the growing season?	YES	✓ NO							
Based On:	Soil Temp (record)				Wetland Hydrol	ogy Indicators:			
V	Other (explain)		data from WF	RCC (2006)	Primary Indic	ators:			
Typical length:	130	Days	5% =	6.5 days		Inunda	ted		
						Saturat	ed Upper 12 I	nches	
Recorded Data (describe l	pelow):					Water I	Marks		
	Stream, Lake, or Ti	de Gauge				Drift Lir	nes		
✓	Aerial Photographs					Sedime	ent Deposits		
	Other					✓ Drainag	ge Patterns in	Wetlands	
	None Available								
Field Observations:					Secondary Inc	dicators (2 or more	required):		
Depth of Sur	rface Water:	none	inches		Cooondary inc			es in Upper 12 l	nches
l '	inding Water in Pit:	>18	inches			=	Stained Leave		
Depth to Sat	-	>18	inches				oil Survey Da		
			=			FAC-N	eutral Test		
						Other (explain below)	
Wetland Hydrology F	Present?		✓ YES	NO					
Remarks:									

11/1/2006 DP-5

eon e

Map Unit Nam	ne (series and	phase):	Jabu stony sandy loa	m, mod. fine subs	oil, variant,	2-9% slopes	Drainage Class:	Well-drained		
Taxonomy (sul	ıbgroup):	Ultic Haplox	eralfs			Field observation	ons confirm mappe	d type?	✓ YES	NO
ls data point lo	ocated within a	hvdric inclus	ion?	YES V	NO					
Profile Descrip		,								
<u> </u>						Re	edoximorphic Featu	ires		
									1	
	Depth			Matrix Co	olor	Abundance,				
Horizon	(inches)	Texture	Structure	(moist)		Size, Contrast	Type, location	Color (moist)		Other
	0-4 4-18	sil sl		10YR 3/ 10YR 4/		none	Fe-x, mat	5YR 3/4		
	4-10	51		101K 4/	/4	c,3,p	re-x, mat	31K 3/4		
Hydric Soil Inc	dicators (check		/):	<u> </u>			-			•
		Histosol					Concretions or Nod			
		Histic Epipe					nic Content in Surf	-	ndy Soils	
		Sulfidic Odo					treaking in Sandy S			
		Aquic Moist	are Regime onditions (α , α !	dinyridyl teet\			National/Local Hydi olain below)	IIC SOIIS LIST		
		Ü	ow-Chroma (<1) ma	, , ,		Oniei (ext	Jiani bolow)			
		•	ma ≤2 with Redoxin		rations ar	nd/or Depletions	5			
Hydric Soil	Is Present?			✓ YES	NO					
Remarks:										
•	•	,	vetland. Over tim In anaerobic envi	. •		•	ced during the wi		•	
Pondero should be	e conducive t	to creating a		. •		•	•		•	
(Pondero should be	e conducive t	to creating a		ronment that w	vill likely	•	•		•	
(Pondero should be wetland to Hydrophytic	DETERMINA vegetation pre	TION :		ronment that w	vill likely	•	•		•	
(Pondero should be should	DETERMINA: vegetation pre	TION :		✓ YES	vill likely	lead to the de	velopment of red	oximorphic con	ncentration	ons in the soils.
(Pondero should be should be wetland be wetland hydeliand hydeliand hydeliand soils are wetland soils are wetlands.)	DETERMINA vegetation predrology present?	TION :	n anaerobic envi	✓ YES [✓ YES [✓ YES [NO NO NO	lead to the de	ng point within a	oximorphic con	•	
WETLAND E Hydrophytic Wetland hyd Hydric soils Remarks:	DETERMINA vegetation predrology present?	TION :	n anaerobic envi	✓ YES [✓ YES [✓ YES [NO NO NO	lead to the de	velopment of red	oximorphic con	ncentration	ons in the soils.
WETLAND DE Hydrophytic Wetland hyd Hydric soils Data poi	DETERMINA vegetation pre drology present present? int is located	TION: seent? within a sec	n anaerobic envi	✓ YES ✓ YES ✓ YES ✓ YES ✓ YES ✓ Basin with an	NO NO NO Input (cu	Is the samplinulvert) and out	ng point within a v	wetland? in).	✓ YES	ons in the soils. □ NO
WETLAND DE Hydrophytic Wetland hyd Hydric soils Data poi	DETERMINA e vegetation pre drology present present? int is located	TION: seent? within a sec	liment catchment	✓ YES [✓ YES [✓ YES [✓ YES [✓ YES]	NO NO NO Input (cu	lead to the de	ng point within a v	wetland?	✓ YES	□ NO
WETLAND E Hydrophytic Wetland hyd Hydric soils Remarks: Data poi	DETERMINA vegetation pre drology present present? int is located	TION: sesent? within a sec	liment catchment	vyes [vy	NO NO Input (cu	Is the samplinulvert) and out Abundance f - few c - commor	ng point within a viput (overflow dra	wetland? in). rphic Feature Type Fe-x - iron or Fe-nc - iron iron	YES Morpho concentration concentration concentration concentration	Ilogy In (soft mass) Concretion
WETLAND E Hydrophytic Wetland hyd Hydric soils Remarks: Data poi	DETERMINA vegetation pre drology present present? int is located	TION: esent? within a second vfsl - very fine l - loam sil - silt loam	liment catchment	vent Rock Fragments gr - gravelly ygr - very gravelly xgr - extremely gr	NO NO Input (cu	Is the samplinulvert) and out	ng point within a viput (overflow dra	wetland? in). rphic Feature Type Fe-x - iron co Fe-nc - iron in Mn-x - mang	Morpho Concentration	NO
WETLAND E Hydrophytic Wetland hyd Hydric soils Remarks: Data poi	DETERMINA e vegetation pre drology present present? int is located to	TION: sesent? within a sec	liment catchment	vyes [vy	NO NO NO Input (cu	Is the samplinulvert) and out Abundance f - few c - commor	ng point within a viput (overflow dra	wetland? in). rphic Feature Type Fe-x - iron co Fe-nc - iron in Mn-x - mang	YES Morpho concentration concentration	Ilogy In (soft mass) Concretion
WETLAND E Hydrophytic Wetland hyd Hydric soils Remarks: Data poi Texture cos - coarse san s - sand fs - fine sand vfs - very fine sa lcos - loamy coa Is - loamy sand	DETERMINA vegetation pre drology present present? int is located Textur and and arse sand	re and Rock vfsl - very fine I - loam sil - silt scl - sandy cl cl - clay loam	liment catchment sandy loam	tent Rock Fragments gr - gravelly vgr - very gravelly xgr - extremely gr cb - cobbly xcb - extremely cc	NO NO NO Input (cu	Abundance f - few c - commor m - many Size 1 - fine (<2r	Redoximo e mm)	wetland? in). rphic Feature Type Fe-x - iron or Fe-nc - iron or Mn-x - mang Mn-nc - man d - depletion	YES Morpho concentration concentration	NO No logy I (soft mass) Concretion Contraction (soft mass)
WETLAND D Hydrophytic Wetland hyd Hydric soils Remarks: Data poi Texture cos - coarse san s - sand fs - fine sand vfs - very fine sa lcos - loamy coa	DETERMINA vegetation pre drology present present? int is located Textur and and arse sand sand	TION: seent? tree and Rocl vfsI - very fine I - loam sil - silt loam si - silt scl - sandy cla	liment catchment Fragment Cont sandy loam loam	tent Rock Fragments gr - gravelly vgr - very gravelly vgr - very cobbly vcb - very cobbly	NO NO NO Input (cu	Abundance f - few c - commor m - many Size	Redoximo e mm) 12-5mm)	wetland? in). rphic Feature Type Fe-x - iron or Fe-nc - iron or Mn-x - mang Mn-nc - man	Morpho concentration module or crianese concertion and the concertion and the concertion and the concertion and the concertion are second ganese not the concentration.	NO

Contrast f - faint d - distinct

p - prominent

mat - soil matrix ped - ped surface por - soil pores otr - other 3 - coarse (5–20mm) 4 - very coarse (20–76mm) 5 - extremely coarse (>76mm)

11/1/2006 DP-5

c - clay

sl - sandy loam fsl - fine sandy loam



DATA FORM

Jones &	Sw	es		ROUTINE W	ETLAND DE	ETERMINATION					
		Kings Beach Con	gs Beach Commercial Core Improvement Project cer County Department of Public Works				State: California				
Applicant/Owner:	Placer County De	Placer									
Investigator(s): C. Voigt, J. Cook							19/16N/18E				
Date: 09/19/06											
Do normal circumstances exist on the site?				✓ YES	NO	Community ID: Ponderosa		pine woodland			
Is the site significantly disturbed (atypical situat					Transect ID:	DW-2					
Is the area a potential problem area?				YES	✓ NO	Plot ID:	DP-6				
(If needed, expla	ain belov	v)									
VEGETATION	N										
Dominant Plant Species			Strata	% Rel. Cover	Indicator	Associate Plan	Associate Plant Species Strata % Rel.			Indicator	
Grindelia camporum			Н	30	FACU	Aster eatonii	•	Н	10	FAC	
Melica fugax			Н	30	NL						
Aira caryophyllea			Н	30	NL						
Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 0%						•	Total ven	etation cover	75	%	
T Groom or domin	iarno triat	. dio OBE, 171011, oi	1710 (000101	anig 1710).	070		_ rotal vog	otation cover		. 70	
Morphological Adaptations							Personal Knowled	lae of Pegion	al Plant Commu	nitioe	
Physiological/Reproductive Adaptations							Technical Literatu	-	arriant commu	Tillioo	
Visual Observation of Plant Species Growing in Areas of						Other (explain below)					
Prolonged Inundation/Saturation							Other (explain bei	OW)			
Hydrophytic Vegetation Present?											
Tionianio.											
HYDROLOGY	Y										
Is it the growing se	eason?	YES	✓ NO								
Based On:	ed On: Soil Te					Wetland Hydrol	land Hydrology Indicators:				
	√	Other (explain)				Primary Indicators:					
Typical length:		130	Days	5% =	6.5 days	1	Inunda	ed			
Typical length.		100	Days	070	0.0 days	1		ed Upper 12	Inches		
Recorded Data (describe below):							Water I		monos		
Stream, Lake, or Tide Gauge											
			•				Drift Lir				
	✓	Aerial Photographs						ent Deposits			
L		Other					Drainag	ge Patterns in	Wetlands		
L		None Available				4					
Field Observations:						Secondary Indicators (2 or more required):					
Depth of Surface Water: non				inches			Oxidized Rhizospheres in Upper 12 Inches			nches	
Depth to Standing Water in Pit:			>12	inches			Water-	Stained Leave	es		
Depth to Saturated Soil: >1				inches			Local S	oil Survey Da	ata		
								eutral Test			
							Other (explain below	<u>')</u>		
Wetland Hydrology Present?				YES	✓ NO						

11/1/2006 DP-6

Remarks:

SOILS Plot ID: DP-6

									10t 1D: D1 -0
Map Unit Name	e (series and	phase):	Jabu stony sandy lo	am, mod. fine s	ubsoil, varia	nt, 2-9% slopes	Drainage Class:	Well-drained	
Taxonomy (sub	•	Ultic Haplox				ons confirm mappe		✓ YES NO	
					- I leid observati	ons commit mappe	su type:		
Is data point loc		hydric inclu	sion?	YES					
Profile Descript	tion			_					
 						Re	edoximorphic Featu	ıres	-
Horizon	Depth (inches)	Texture	Structure	Matrix (mo		Abundance, Size, Contrast	Type, location	Color (moist)	Other
TIONZON	0-12	grsl	Structure	7.5YF		none	Type, location		Other
	· · · · ·	9.0.		7.011	<u> </u>	110110			
Hydric Soil Indi	icators (chec	k all that app	ly):						
		Histosol					Concretions or No		
		Histic Epipe					nic Content in Sur	=	andy Soils
		Sulfidic Odd					treaking in Sandy		
			ure Regime				National/Local Hyd	Iric Soils List	
		_	conditions (α , α ow-Chroma (\leq 1) m		t)	✓ Other (exp	olain below)		
	H	-	ma ≤2 with Redox		centrations	and/or Depletion	ne		
Hudria Caila	D=====================================	Matrix Crito	IIIa <u>-</u> 2 Willi Nedox	YES	✓ NO	and/or Depletion	15		
Hydric Soils Remarks:	Present?				L NO				
WETLAND DE	ETERMINA	TION :							
Hydrophytic v	egetation pre	esent?		YES	✓ NO				
Wetland hydr	ology presen	nt?		YES	✓ NO				
Hydric soils p	resent?			YES	✓ NO	Is the samplin	ng point within a	wetland?	YES NO
Remarks:									
	Textu	re and Roc	k Fragment Con					Morphology	
Cos - coarse sand	1	vfsl - vary fin	e sandy loam	gr - gravelly	ents	Abundanc f - few	e	Type Fe-x - iron c	concentration (soft mass)
s - sand	•	I - loam	o danay idani	vgr - very grav	velly	c - commor	า		nodule or concretion
fs - fine sand		sil - silt loam		xgr - extremel	-	m - many		Mn-x - man	ganese concentration (soft mass)
vfs - very fine san		si - silt	ay loam	cb - cobbly	bly	Cina			nganese nodule or concretion
lcos - loamy coars	se sand	scl - sandy cl cl - clay loam	•	vcb - very cob xcb - extreme	-	Size 1 - fine (<2	mm)	d - depletion	1
Ifs - loamy fine sa	ınd	sicl - silty cla		st - stony	., cobbiy	2 - medium	,	Location	
lvfs - loamy very f	fine sand	sc - sandy cla	ау	vst - very ston	•	3 - coarse	(5–20mm)	mat - soil m	
cosl - coarse sand	dy loam	sic - silty clay	′	xst - extremely	y stony		arse (20–76mm)	ped - ped si	
sl - sandy loam c - clay					o - extreme	ely coarse (>76mm)	por - soil po	100	

Contrast f - faint d - distinct

p - prominent

mat - soil matrix ped - ped surface por - soil pores otr - other

DP-6

11/1/2006

fsl - fine sandy loam



DATA FORM ROUTINE WETLAND DETERMINATION

Project/Site:	Kings Beach Commercial	Core Improver	ment Project	State:	California
Applicant/Owner:	Placer County Departmen	t of Public Wor	rks	County:	Placer
Investigator(s):	C. Voigt, J. Cook			S/T/R	19/16N/18E
Date:	09/20/06				
Do normal circumstanc	✓ YES	NO	Community ID:	Depressional Wetland	
Is the site significantly of	disturbed (atypical situation)?	YES	✓ NO	Transect ID:	DW-4
Is the area a potential p	roblem area?	YES	✓ NO	Plot ID:	DP-7
(If needed, explain be	elow)				
VEGETATION					

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant	Species	Strata	% Rel. Cover	Indicator	
Juncus balticus	Н	35	OBL						
Eleocharis pauciflora	Н	20	OBL						
Leymus triticoides	Н	25	FAC+						
Aira caryophyllea	Н	20	NL						
Percent of dominants that are OBL, FACW, or	FAC (exclud	ing FAC-):	75%		Total veg	etation cover	60	%	
Morphological Adaptations Physiological/Reproductive Adap Visual Observation of Plant Spec	Personal Knowledge of Regional Plant Communities Technical Literature Other (explain below)								
Hydrophytic Vegetation Present?	Hydrophytic Vegetation Present?								
Remarks:									

HYDROLOGY

HIDROLO	<u> </u>									
Is it the growing season? YES NO										
Based On:		Soil Temp (record)				Wetland Hydrology Indicators:				
	✓	Other (explain)		data from W	/RCC (2006)	Primary Indica				
Typical length:		130	Days	5% =	6.5 days			Inundated		
								Saturated Upper 12 Inches		
Recorded Data	a (describe b	pelow):						Water Marks		
		Stream, Lake, or Ti	ide Gauge					Drift Lines		
	✓	Aerial Photographs					V	Sediment Deposits		
		Other					V	Drainage Patterns in Wetlands		
		None Available								
Field Observati	ions:					Secondary Indicators (2 or more required):				
	Depth of Sur	face Water:	none	inches				Oxidized Rhizospheres in Upper 12 Inches		
	Depth to Sta	nding Water in Pit:	>12	inches				Water-Stained Leaves		
[Depth to Sat	urated Soil:	>12	inches				Local Soil Survey Data		
								FAC-Neutral Test		
								Other (explain below)		
Wetland Hy	drology F	Present?		✓ YES	☐ NO					
Remarks:										

11/1/2006 DP-7

0011.0

SUILS								Р	lot ID: DP-7
Map Unit Na	me (series and	phase):	Jabu stony sandy loa	ım, mod. fine sub	soil, variant	, 2-9% slopes	Drainage Class:		
Taxonomy (s	ubgroup):	Ultic Haplox	ceralfs			Field observation	Field observations confirm mapped type?		
ls data point	located within a	hvdric inclus	sion?	YES 🗸	NO				
Profile Desci		,							
						Re	edoximorphic Featu	ires	
	Depth			Matrix C		Abundance,			
Horizon	(inches)	Texture	Structure	(mois		Size, Contrast	Type, location	Color (moist)	Other
	0-1 1-12	sil vgrsl		10YR :		none			
	1-12	vgisi		1011	3/3	Hone			
Hydric Soil Ir	ndicators (check		y):						
		Histosol	4				Concretions or Nod		- d- O - 11-
		Histic Epipe Sulfidic Odd					anic Content in Surfa treaking in Sandy S	•	ady Solis
		Aquic Moist				_	National/Local Hydi		
	П		conditions (α , α !	dipyridyl test)			olain below)		
		Gleyed or L	ow-Chroma (≤1) ma	atrix					
		Matrix Chro	ma <u>≤</u> 2 with Redoxin	norphic Concer	ntrations ar	nd/or Depletions	3		
Hydric So	ils Present?			✓ YES	NO				
Remarks:									e lack of a conventional
WETLAND	DETERMINA	TION :							
Hydrophyti	c vegetation pre	esent?		✓ YES	NO				
Wetland hy	/drology present	t?		_	NO				
Hydric soils				✓ YES	NO	Is the samplir	ng point within a v	wetland?	YES NO
Remarks:	•						31		
	int is located v		iment detention b	asin with an i	nput (culv	ert) at the nor	th end of the bas	in and an outp	ut (overflow drain) at the
	Textur	e and Roc	k Fragment Cont					rphic Feature	Morphology
Texture		fal		Rock Fragment	ts	Abundance	e	Type	an contration (oof)
cos - coarse sa s - sand	anu	vfsl - very fine I - loam	г запиу юат	gr - gravelly vgr - very gravel	lly	f - few c - commor	1		oncentration (soft mass) nodule or concretion
fs - fine sand		sil - silt loam		xgr - extremely		m - many		Mn-x - mang	anese concentration (soft mass)
vfs - very fine s lcos - loamy co		si - silt scl - sandy cl	av loam	cb - cobbly vcb - very cobbl	v	Size		Mn-nc - man d - depletion	ganese nodule or concretion
ls - loamy sand	t	cl - clay loam		xcb - extremely	•	1 - fine (<2r	,	· ·	
Ifs - loamy fine lvfs - loamy ver		sicl - silty clay sc - sandy cla		st - stony vst - very stony		2 - medium 3 - coarse (Location mat - soil ma	ıtrix
carry voi	. ,	_ Janay Old	y vst - very stony			5 000136 (50111116	

xst - extremely stony

4 - very coarse (20–76mm)

5 - extremely coarse (>76mm)

Contrast f - faint

d - distinct

p - prominent

ped - ped surface por - soil pores otr - other

11/1/2006 DP-7

sic - silty clay

c - clay

cosl - coarse sandy loam

sl - sandy loam

fsl - fine sandy loam



DATA FORM

Joines & 5151.					ETERMINATION					
Project/Site: Kings Beach Commerc			re Improveme	nt Project	State:	California				
Applicant/Owner: Placer County Depa		epartment o	f Public Works	<u> </u>	County:	Placer				
Investigator(s):	C. Voigt, J. Cook 09/20/06				S/T/R	19/16N/18E				
Date:										
Do normal circumstances			✓ YES	Community ID:	Ruderal					
Is the site significantly dist		tion)?	YES	✓ NO	Transect ID:	DW-4				
Is the area a potential prol			YES	✓ NO	Plot ID:	DP-8				
(If needed, explain below	V)									
VEGETATION										
Dominant Plant Species		Strata	% Rel. Cover	Indicator	Associate Plant	t Species	Strata	% Rel. Cover	Indicator	
Elytrigia repens		Н	100	NI*						
Percent of dominants that	t are OBL, FACW, or	FAC (exclud	ling FAC-):	0%		Total veg	etation cover	75	%	
_										
	al Adaptations					Personal Knowled		al Plant Commu	nities	
	al/Reproductive Adap					Technical Literatu				
	rvation of Plant Spec		in Areas of			Other (explain bel	ow)			
Prolonge	ed Inundation/Satura	tion								
Hydrophytic Vegeta	ation Present?		YES	✓ NO						
Remarks:										
HYDROLOGY										
Is it the growing season?	YES	✓ NO								
Based On:	Soil Temp (record)				Wetland Hydrolo	ogy Indicators:				
V	Other (explain)		data from WF	RCC (2006)	Primary Indic	ators:				
Typical length:	130	Days	5% =	6.5 days		Inunda	ted			
		•				Saturat	ed Upper 12 I	nches		
Recorded Data (describe	below):					☐ Water I	Marks			
	Stream, Lake, or Ti	de Gauge				Drift Lir	nes			
✓	Aerial Photographs					Sedime	ent Deposits			
	Other						ge Patterns in	Wetlands		
	None Available						,0 1 4	···oua.rao		
Field Observations:					Constitution (Inc	diantana (2 au manu	···			
Depth of Su	rface Water:	none	inches		Secondary inc	dicators (2 or more		es in Upper 12 I	Inches	
l '	anding Water in Pit:	>10	inches			=	Stained Leave		Tiches	
Depth to Sa	-	>10	inches				soil Survey Da			
Boptii to cu	turatou con.	- 10	monoo				eutral Test	ila		
							explain below)		
Wetland Hydrology I	Present?		YES	✓ NO		,				
Remarks:										

11/1/2006 DP-8

SOILS Plot ID: DP-8

JUILJ								101 ID: DP-8		
Map Unit Name (series	and phase):	Jabu stony sandy lo	am, mod. fine	subsoil, variar	nt, 2-9% slopes	Drainage Class:	Well-drained			
Taxonomy (subgroup):	Ultic Haple	exeralfs		Field observati	ons confirm mappe	d type?	✓ YES	NO		
s data point located wit	thin a hvdric inclu	ısion?	YES							
Profile Description	, ,			✓ <mark>NO</mark>						
1				R	edoximorphic Featu	ıres				
								1		
Depth	n		Matri	x Color	Abundance,					
Horizon (inche		Structure	,	oist)	Size, Contrast	Type, location	Color (moist)		Other	
0-10	xgrsl		10Y	'R 3/3	none					
Hydric Soil Indicators (oly):								
	Histosol				_	Concretions or Nod		adu Call-		
	Histic Epip					anic Content in Surf	=	nay Soils		
	_	sture Regime				Streaking in Sandy S National/Local Hyd				
		Conditions (α , α	- dipyridyl tes	st)	_	plain below)	Como Elot			
		Low-Chroma (≤1) m				,				
	Matrix Chr	oma <u>≤</u> 2 with Redoxi			and/or Depletions	s				
Hydric Soils Prese	ent?		YES	✓ NO						
VETLAND DETERM	INATION:									
Hydrophytic vegetation	on present?		YES	✓ NO						
Wetland hydrology pr	esent?		YES	✓ NO						
Hydric soils present?			YES	✓ NO	Is the sampli	ng point within a	wetland?	YES	✓ NO	
Remarks:										
Te	exture and Ro	ck Fragment Cor	ntent			Redoximo	orphic Feature	& Morpholo	αv	
Texture Texture			Rock Fragm	ents	Abundanc		Туре		<i>3)</i>	
os - coarse sand	,	ne sandy loam	gr - gravelly		f - few		Fe-x - iron c	oncentration (s		
s - sand s - fine sand	l - Ioam sil - silt Ioan	2	vgr - very gra		c - commoi	n		nodule or concer	cretion stration (soft mass)	
s - fine sand fs - very fine sand	sii - silt ioan	1	cb - cobbly	ary gravelly	m - many		-		e or concretion	
cos - loamy coarse sand	scl - sandy	•	vcb - very co	-	Size		d - depletion			
s - loamy sand s - loamy fine sand	cl - clay loa sicl - silty cl		xcb - extreme st - stony	ely cobbly	1 - fine (<2 2 - medium	,	Location			
rfs - loamy very fine sand	sc - sandy o	clay	vst - very sto	•	3 - coarse	(5–20mm)	mat - soil matrix			
cosl - coarse sandy loam sic - silty clay			xst - extreme	ly stony	4 - very coa	arse (20-76mm)	ped - ped su	ped - ped surface		

cosl - coarse sandy loam sl - sandy loam

fsl - fine sandy loam

sic - silty clay c - clay

- 4 very coarse (20–76mm) 5 extremely coarse (>76mm)

Contrast f - faint

- d distinct
- p prominent

ped - ped surface por - soil pores otr - other

11/1/2006 DP-8

Appendix B Species List

Appendix B. Plant Species Observed in Delineation Study Area

Scientific Name	Common Name	Indicator Status ^a
Abies concolor	White fir	NI
Aira caryophyllea	Silver hairgrass	NI
Alnus incana ssp. tenuifolia	Mountain alder	NI
Arrhenatherum elatius	Tall oatgrass	FACU
Arctostaphylos sp.	Manzanita	NA
Artemisia douglasiana	Mugwort	FACW
Aster eatonii	Eaton's aster	FAC
Calocedrus decurrens	Incense cedar	NI
Carex amplifolia	Big-leaf sedge	OBL
Cornus sericea ssp. sericea [Cornus stolonifera]	American dogwood	FACW
Dactylis glomerata	Orchard grass	FACU
Deschampsia danthonioides	Annual hairgrass	FACW
Eleocharis pauciflora	Fewflower spikerush	OBL
Elymus elymoides [Sitanion hystrix]	Squirreltail	FACU-
Elymus lanceolatus ssp. lanceolatus [Agropyron dasystachyum]	Thickspike wheatgrass	NI
Elytrigia repens [Agropyron repens]	Quackgrass	NI
Equisetum hymemale	Common scouring rush	FACW
Grindelia camporum	Common gumplant	FACU
Juncus balticus	Baltic rush	OBL
Juncus macrandus	Long-anthered rush	OBL
Juncus mexicanus	Mexican rush	FACW
Juncus xiphioides	Iris-leaved rush	OBL
Lepidium campestre	English pepper grass	NI
Leymus triticoides [Elymus triticoides]	Creeping wild-rye	FAC+
Lotus corniculatus	Birdsfoot trefoil	FAC
Lupinus latifolius	Broad-leaf lupine	NI
Melica fugax	Small oniongrass	NI
Pinus jeffreyi	Jeffrey pine	NI
Pinus ponderosa	Ponderosa pine	FACU
Polygonum douglasii	Douglas' knotweed	FACU
Populus balsamifera ssp. trichocarpa	Black cottonwood	FACW
Populus tremuloides [Populus tremula]	Quaking aspen	FAC+
Rosa woodsii var. ultramontana	Mountain Rose	FAC-
Rubus parviflorus	Thimbleberry	FAC+
Salix lucida var. lasiandra	Pacific willow	NI
Salix lutea	Yellow willow	OBL
Scirpus americanus	American bulrush	OBL
Scirpus microcarpus	Small-fruited bulrush	OBL
Tanacetum vulgare	Common tansy	NI

^a Wetland indicator status obtained from Reed (1988).

Appendix C Representative Photographs



Depressional Wetland #1



Depressional Wetland #2

06676.06 001 (10/06)



Depressional Wetland #3



Depressional Wetland #4

06676.06 001 (10/06)



Depressional Wetland #5



Depressional Wetland #6

06676.06 001 (10/06)



Depressional Wetland #7



Intermittent Drainage Photo #1



Intermittent Drainage Photo #2

06676.06 004 (10/06)



Intermittent Drainage Photo #3



Intermittent Drainage Photo #4

06676.06 004 (10/06)



SP-1a Griff Creek



SP-1b Griff Creek



SP-1b Oxbow Bend

U.S. Army Corps of Engineers Verification Letter

REPLY TO ATTENTION OF

DEPARTMENT OF THE ARMY

U.S. ARMY ENGINEER DISTRICT, SACRAMENTO CORPS OF ENGINEERS 1325 J STREET SACRAMENTO, CALIFORNIA 95814-2922

February 26, 2007

Regulatory Branch (200600998)

Dan LaPlante
Placer County Department of Public Works
Pioneer Commerce Center
10825 Pioneer Trail
Suite 105
Truckee, California 96161

Dear Mr. LaPlante:

We are responding to your consultant's request for an approved jurisdictional determination for the Kings Beach Commercial Core Improvement project. This approximately 74.8-acre site is located adjacent to Lake Tahoe in Sections 13 and 19 on the Kings Beach 7.5 minute USGS quadrangle, Placer County, California.

Based on available information, we concur with the estimate of waters of the United States, as depicted on the October 2006 maps ("Exhibit A", sheets 1, 2 and 3; enclosed) prepared by Jones and Stokes. Approximately 0.719 acres of waters of the United States, including wetlands, are present within the survey area. These waters are regulated under Section 404 of the Clean Water Act. In addition, Lake Tahoe is regulated under Section 10 of the Rivers and Harbors Act. Lake Tahoe is a navigable waterway and the other features are either tributary to the Lake, or adjacent to a tributary.

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This letter contains an approved jurisdictional determination for your subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the South Pacific Division Office at the following address: Doug Pomeroy, Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPD-PDS-O, 333 Market Street, Room 923, San Francisco, California 94105-2195, Telephone: 415-977-8035 FAX: 415-977-8129.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the NAP. Should you decide to submit an RFA form, it must be received at the above address by May 21, 2007. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property. s request.

Please refer to identification number 200600998 in any correspondence concerning this project. If you have any questions, please contact Ms. Kathleen Dadey at our Nevada Regulatory Office, C. Clifton Young Federal Building, 300 Booth Street, Room 2103, Reno, Nevada 89509-1361, email kathleen.a.dadey@usace.army.mil, or telephone 775-784-5305. You may also find additional information on our website: www.spk.usace.army.mil/regulatory.html.

Sincerely,

Ms. Kathleen Dadev Acting Office Chief Reno Office

Enclosure(s)

Copy furnished without enclosure(s):

Scott Frazier, Jones & Stokes, 2600 V Street, Sacramento, California 95818-1914 Mary Fiore-Wagner, California Regional Water Quality Control Board, Lahontan Region, 2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150-7747 Tobi Tyler, California Regional Water Quality Control Board, Lahontan Region, 2501 Lake

Tahoe Blvd., South Lake Tahoe, California 96150-7747

U.S. Fish and Wildlife Service, Wetlands Branch, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901

U.S. Fish and Wildlife Service, Endangered Species Division, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901

Mary Hays, California State Lands Commission, 100 Howe Ave., Ste. 100 South, Sacramento, California 95825-8202